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## 25. NEW RECORDS OF WILDLIFE FROM THE CHITTAGONG HILL TRACTS OF BANGLADESH

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The Chittagong Hill Tracts (21° 25'–23° 45' N; 91° 54'–92° 50' E) is the most remote and least explored area in Bangladesh. It is situated in the southeastern part of Bangladesh along the borders of Mizoram and Tripura states of India, and Myanmar. The total area is about 13,184 sq. km, which is divided into three administrative districts, namely Khagrachari, Rangamati, and Bandarban. The Chittagong Hill Tracts (CHT) is in the western end of Indo-Burma Biodiversity Hotspot (Conservation International 2012) at the confluence of two biogeographic sub-regions: Indo-Himalaya and Indo-China. The area is mostly hilly, covered by natural evergreen forests, bamboo, bush, and reeds, as well as shifting cultivation and plantations of timber trees. The climate is the tropical monsoon type with mean annual rainfall about 2,540 mm. Hills of the CHT are the highest elevation areas in Bangladesh, with Saka Haflong (or Tlangmoi) peak in the Bangladesh-Myanmar border having the country's highest elevation (more than 1,000 m). The human population density is the lowest in Bangladesh.

Due to its remoteness and low population, the biodiversity of the CHT is rich but is still unexplored, as indicated by the records of five vertebrate wildlife species new to Bangladesh which were recorded from November 2010 to November 2011. These species were recorded from sightings and photographs, and through capture and recording

of measurements in the case of frog species. These comprise of a squirrel, a bat, a turtle, and two frog species. All the five new records were published, with colour photos, in the most popular daily newspaper of Bangladesh *Prothom Alo* (December 04, 2010 for the two mammals, October 10, 2011 for the two frog species, and December 23, 2011 for the turtle). These species are not listed in the recent checklists of wildlife of Bangladesh (Ahmed *et al.* 2009a; Kabir *et al.* 2009; Khan 2008; Khan 2010). Among the other sightings are those of several rare species of bird and a frog. The new records and other interesting sightings are discussed in this article:

A Himalayan Striped Squirrel *Tamiops macclellandi* was found foraging along the branches of a medium-sized tree in evergreen forest on a slope of Capital Hill (21° 53.33' N; 92° 31.49' E) in Theikkang, Ruma, Bandarban, on November 22, 2010, in the morning. It was a small squirrel with a relatively big head and greyish brown back with four black, brown, and buff stripes, which agrees with the characteristics of the Himalayan Striped Squirrel. It was significantly smaller than the other two striped squirrels of the region: Indian Palm Squirrel *Funambulus palmarum* and Northern Palm Squirrel *F. pennantii* (Menon 2003; Prater 1980). The nearest known distribution of this species is in north-east India (Menon 2003).

A colony of about 40 Least Leaf-nosed Bat

*Hipposideros cineraceus*, together with a few Blyth's Horseshoe Bat *Rhinolophus lepidus*, was seen inside Boga Cave (21° 58.95' N; 92° 28.59' E) in Ruma, Bandorban, on November 20, 2010. The area surrounding the cave had dense vegetation. The species was differentiated from Blyth's Horseshoe Bat and other small cave-bats of the region by its very small size, very pale (almost white) orange coat in underparts, and the very small leaf-nose (Bates 1997; Menon 2003). The nearest known distribution of this species is along the Himalayan foothills in north-east India (Bates 1997; Menon 2003).

A young Asian Softshell Turtle *Amyda cartilaginea* was found in shallow waters of a rocky hill-stream called Remakri Khal (21° 50.94' N; 92° 34.11' E) in Thanci, Bandorban, on November 17, 2011. Later, another freshly hunted adult was seen with an ethnic Mru turtle hunter downstream. The hunter was hunting for more by jabbing his metallic spear in the mud of a stream bed. I also came across a group of three turtle hunters, who were doing the same, and was informed that they occasionally hunt this turtle and another turtle species (presumably Leaf Turtle *Cyclemys* sp., based on their description) from the stream. Later, a large shell of Asian Softshell Turtle was seen in a nearby Mru village (Nepew Para). Both the live and the freshly hunted specimens had the characteristic low carapace with rounded sides, and with tubercles at the anterior margin and numerous folds all along the carapace; relatively narrow head, and long and slender snout. These characteristics differentiate the species from other softshell turtles of the region (Ahmed *et al.* 2009b; Das 2010). The nearest known distribution of the species is in Myanmar and Northeast India (Ahmed *et al.* 2009b; Das 2010).

Several specimens of Anderson's Bush Frog *Phyllautus andersoni* were seen in evergreen and plantation forest undergrowth in Kaptai National Park (22° 30.13' N; 92° 11.67' E), Rangamati, in June and July 2010. All were located in the evening when they start calling from leaves or narrow branches of the undergrowth, usually between 0.5–1.5 m above the ground. The call was a sharp *tok, tok, tok*. Two specimens were captured for detailed morphometry. Snout to vent length was 24 and 25 mm, respectively, which are similar to the known snout to vent length of the species (Chanda 2002). Olive or yellowish olive upperparts and whitish underparts. Only one specimen had a broad white inter-orbital band. Notably, two of the 24 specimens collected from Shillong, Meghalaya, India, were reported to have white marking on the median dorsal part (Pillai and Chanda 1979), but not the white inter-orbital band. However, since all other characteristics were the same as other specimens of Anderson's Bush Frog, namely "A narrow fold of skin from

the posterior corner of eyes up to the shoulder. Head broader than long and slightly depressed. Nostrils much closer to tip of snout than to eyes. Tibio-tarsal articulation reaches the anterior corner of the eye. First finger slightly shorter than second. Toes free with swollen tips", I have identified it as the same species. No other species under the genus *Phyllautus* were ever found, but the East Himalayan Bush Frog *P. annandalii*, Shillong Bush Frog *P. shillongensis*, and Garo Hills Bubble-nest Frog *P. garo* are expected to occur in Bangladesh. Anderson's Bush Frog is much larger than these three species, and moreover, the Garo Hills Bubble-nest Frog has very dark upperparts, which is unique to the species. The nearest known distribution of Anderson's Bush Frog is in Northeast India and Myanmar (Ahmed *et al.* 2009b; Chanda 2002).

Two Nicobarese Frog *Hylarana nicobariensis* were found in a small ditch at the top of a bushy and cultivated hill in Moyu (22° 06.18' N; 92° 19.14' E), Roangchari, Bandorban, on November 16, 2010, during a night search. They were found floating on water and calling. The call was loud. One specimen was captured for detailed morphometry: "Snout-vent length was 49 mm. Yellowish-brown upperparts with large dark markings and whitish underparts. Dark sides of head. Limbs with dark cross-bands. A prominent glandular dorso-lateral fold from above the tympanum to the hip. Very distinct tympanum. Long and slender hindlimbs. Tibio-tarsal articulation reaches the tip of snout. Tips of fingers dilated into small discs. First finger longer than second and third finger longest. Fingers free, toes two-thirds webbed. Prominent subarticular tubercles in toes." These characteristics confirmed its identification as the Nicobarese Frog, and also differentiated it from other *Hylarana* species of the region (Chanda 2002). Unlike this species, the Taiph Frog *H. taipehensis* and Leaf Frog *H. tyleri* have greenish upperparts and white dorso-lateral fold (Chanda 2002; Kabir *et al.* 2009). The nearest known distribution of Nicobarese Frog is in Northeast India and Thailand (Ahmed *et al.* 2009b; Chanda 2002).

A Mountain Hawk-Eagle *Spizaetus nipalensis* was seen soaring above Keokradong Range (21° 55.33' N; 92° 30.52' E), Ruma, Bandorban, on November 21, 2010. Another was seen soaring above the Capital Hill (21° 54.11' N; 92° 31.78' E), Ruma, Bandorban, on November 22, 2010. Both were large with long white-tipped crest and pale wing coverts. In flight, wings were short, square-tipped and heavily banded below and on the tail. Heavily streaked breast, and banded flanks and belly. These characteristics helped differentiate it from the similar Changeable Hawk-Eagle *S. limnaeetus* and Crested Hawk-Eagle *S. cirrhatus* that are found in the region (Grimmett *et al.* 1998; Rasmussen and Anderton 2005). This

is the second sighting of the species in Bangladesh – the previous sighting was in November 2009 in Belaichari, Rangamati (Halder 2010).

An adult male Grey Peacock-Pheasant *Polyplectron bicalcaratum* was seen on a slope of hill beside a stream in evergreen forest in Rampahar (22° 30.44' N; 92° 10.53' E), Kaptai National Park, Rangamati, on April 09, 2010. It was calling at that time. The call was recorded instantly and replayed from the stream to which it responded on several occasions and approached the spot where the call was replayed. After about an hour when I was at the top of a forested hill about one kilometre north-west of the previous spot, I heard the call of a second bird. I replayed the call. The bird stopped calling and after a few minutes it was suddenly seen crossing the narrow trail that I was following. In the next few days, I heard the calls at two more sites (Sitapahar and Rangamati Road) in Kaptai. In May 2011, I visited the same spots and heard calls at three sites. These indicate the presence of a small breeding population of Grey Peacock Pheasant in Kaptai. The only previous recent sighting of this species in Bangladesh was in Babuchara, Khagrachari, in March 2001 (Halder 2010) after the report in 1888 (Hume 1888).

A flock of eight Long-tailed Broadbill *Psarisomus dalhousiae* was seen foraging along the middle canopy, and calling mildly, in a thick forest patch in Capita Hill (21° 53.33' N; 92° 31.49' E), Ruma, Bandarban, on November 22, 2010. The only recent previous sighting of the species in Bangladesh was in eastern Neikkhongchari, Bandarban, in April 2010 (Halder 2010), after the report in 1888 (Hume 1888).

A subadult (partially rufous belly and white underwing coverts) Rufous-bellied Eagle *Hieraetus kiennerii* was seen soaring above Ruitai Hill (23° 22.55' N; 92° 17.64' E), Sajek, Rangamati, on September 29, 2011. An adult was seen soaring above Tadjingdong Hill (21° 48.96' N; 92° 31.82' E), Thanci, Bandarban, on November 20, 2011. The only previous sighting of this species in Bangladesh was in Inani, Cox's

Bazar, in March 1994 (Thompson and Johnson 2003; Siddiqui *et al.* 2008).

An adult Large Tree Frog *Rhacophorus maximus* was found in dense vegetation at a hill-slope in Theikkang (21° 54.37' N; 92° 31.99' E), Ruma, Bandarban, on February 18, 2011. It was captured for thorough morphometry: "Snout-vent length was 115 mm. Leaf green upperparts and white underparts with brown reticulation ventro-laterally. White lower jaw. Skin mainly smooth. Large head with distinct tympanum. Digits with large discs; fully webbed." No other *Rhacophorus* species of the region is as large as this. The only previous sighting of this species in Bangladesh was in eastern Srimgal, Moulvibazar, in December 2008 (Chakma 2009).

Other than the above-mentioned species, I saw a number of species in the Chittagong Hill Tracts from November 2010 to November 2011 that are rare in Bangladesh or have been subjected to fewer recent sightings. These include Hodgson's Giant Flying Squirrel *Petaurista magnificus* and Assam Macaque *Macaca assamensis* among the mammals; White-checked Partridge *Arborophila atrogularis*, Pale-headed Woodpecker *Gecinulus grantia*, Great Slaty Woodpecker *Mulleripicus pulverulentus*, Great Barbet *Megalaima virens*, Oriental Dwarf Kingfisher *Ceyx erithacus*, Grey-headed Parakeet *Psittacula finschii*, Pin-tailed Green-Pigeon *Treron apicauda*, Silver-breasted Broadbill *Serilophus lunatus*, Orange-bellied Leafbird *Chloropsis hardwickii*, Maroon Oriole *Oriolus traillii*, Scaly Thrush *Zosterora dauma*, Plumbeous Water Redstart *Rhyacornis fuliginosus*, Grey Bushchat *Saxicola ferrea*, Chestnut-bellied Nuthatch *Sitta castanea*, Black Bulbul *Hypsipetes leucocephalus*, White-hooded Babler *Gampsorhynchus rufulus*, Striated Yuhina *Yuhina castaniceps*, Common Rosefinch *Carpodacus erythrinus* among the birds, and Northern Trickle Frog *Occidozyga borealis* and Puddle Frog *O. lima* among the amphibians.

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